in places, certainly, considerably more. Interesting suggestions are found in it and the author is undoubtedly right in intimating in his closing paragraph that his tables "suggest more problems than they solve." This, however, points to a manifest defect in his work. Much of his comment upon statistical matter is so obvious that it might, indeed should, have been omitted, if the book was intended (as it evidently is) for the professional economist and statistician. For the popular reader, a wholly different style of treatment and mode of presentation of results would of course have had to be employed. Dr. Mitchell could unquestionably have condensed and thereby improved his volume in many serious and important respects, or, better still, could have presented the statistics and those only (with their absolutely necessary explanations) in an independent volume, reserving to another a condensed and more pointed exposition of conclusions. But this should not be allowed to count too seriously in weighing the genuine value of what the author has accomplished. It is not too much to say that, taking the present volume with his earlier contribution, he has done the most satisfactory piece of work on the history of the greenbacks and their effects that has yet appeared, and in the course of so doing has contributed something to the process of putting American price statistics upon a rather better basis.

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Money and Credit Instruments in Their Relation to General Prices. By E. W. KEMMERER. Cornell Studies in History and Political Science. Vol. I. (New York: Henry Holt and Company, 1907. Pp. 160. $1.25.)

Dr. Kemmerer's work was originally intended as a thesis submitted in candidacy for the degree of Doctor of Philosophy, and is a discussion of the fundamentals in the theory of money and prices. It consists of two "books" each containing eight chapters and followed by a bibliography including books and magazine articles consulted in the preparation of the study. The reasoning in the first book is essentially abstract, assuming a hypothetic society with certain supposititious conditions, which are analyzed in part by the use of mathematical and semi-mathematical methods.

This is followed in the second book by chapters discussing the amounts of money in circulation at specified dates and furnishing statistics intended to supply tests of the actual growth of business as contrasted with the amount of the circulating medium. With this material is coupled a discussion of bank reserves in their relation to monetary media of exchange. The monograph is well balanced theoretically, and there has evidently been a conscientious effort to take account of all of the principal methods of investigation in this field, whatever may be thought of certain applications made of them or of the ways in which the material used is manipulated. The author has done well, too, in throwing much of his mathematical discussion into footnotes, keeping the text free from everything that cannot be clearly followed by a reader only moderately well informed in mathematical modes of expression.

So extensive has the literature of the theory of prices now become and so decidedly technical is the meaning attached by many students to certain expressions of ordinary life which are now seemingly used in an entirely different sense in theoretic discussions of money and prices, that a full discussion of Dr. Kemmerer's line of reasoning in this monograph would necessarily be beyond the compass of the present notice. The author has, however, summarized his conclusions in compact form in his final chapter. These conclusions are four in number: (1) Under given conditions bank reserves tend to increase or decrease according to corresponding changes in the money supply; (2) under given conditions a country's check circulation "will be a function of its bank reserves;" (3) a relative increase in the circulating media is accompanied by a corresponding and proportionate increase in general prices and vice versa; (4) all other things being equal, an increase in money supply is accompanied by a corresponding and proportionate increase in general prices and vice versa. From these statements, is drawn the general conclusion that "the extensive use of checks . . . . does not alter the essential truth of the old quantity theory as that theory was held by the fathers of political economy . . . . ."

It is to be regretted that the author has allowed quite so large an element of controversy to creep into his brief discussion, or that in places he should appear to have misinterpreted some of the arguments or statements he is combating. This consumes

valuable space and at times gives the impression that the monograph is to be taken as a defense of persons and ideas rather than as a carefully-weighed analysis. Other parts of the work, however, are not characterized in this way but are eminently dispassionate and fair. The closing restatement of a rather extreme line of thought as already sketched (given over in this form, we believe, by many of the strongest adherents of the older theory of money and prices) does injustice to not a few of the author's pages and would furnish careless readers an erroneous idea of much of the matter in the book. An element of more or less bitter criticism has, however, been but too frequently characteristic of recent monetary discussions, and Dr. Kemmerer cannot be held responsible for originating it.

At a number of points in its various chapters, *Money and Prices* is open to serious criticism of method and detail—criticisms which cannot be offered here because of space limitations. Technical readers will find these well set forth by Mr. W. M. Persons in the February (1908) number of the Quarterly Journal of Economics. The principal trouble that presents itself to the student in connection with all such extensive uses of price statistics as is here made is that which Professor Marshall clearly puts (and which Dr. Kemmerer quotes), when he says: "I think that we have not the statistics, and that we shall not in this generation be able to get the statistics, which would enable us to trace any statistical connection . . . . between the amount of currency and the average level of prices; because, supposing that the volume of the currency remains the same, the height of average prices may yet vary in consequence of several causes." There is nothing in this work to force a revision of the opinion thus conservatively expressed by Professor Marshall, so far as relates to its inductive side. On its deductive side it is a clear statement of views already outlined. These will no doubt continue to be a subject of controversy among well-equipped economists just as are theories of distribution, value, and kindred subjects and just as abstract problems in other fields of scientific thought still are and will continue to be.

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